



RESPONSE TO:

**MEDICAID COST EFFICIENCIES**  
**RFI# EV0000191**

February 14, 2011

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## ***Background***

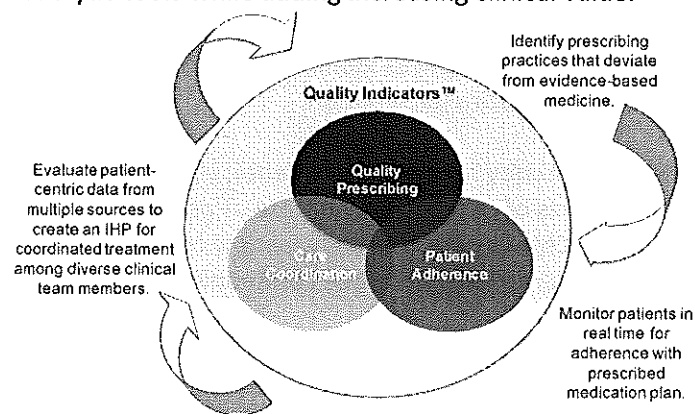
The Kansas Health Policy Authority (KHPA) has invited interested parties to respond to its Request for Information regarding health care cost efficiency projects for Medicaid and children's health insurance (CHIP) beneficiaries (RFI #EV0000191). KHPA must employ various initiatives to help appropriately reduce cost and utilization, including options demonstrating quality outcomes and meaningful outreach and education to both primary care practitioners and mental health providers.

In order to assist KHPA, Care Management Technologies (CMT) proposes a comprehensive set of solutions for the Medicaid Adult population, CHIP beneficiaries, and a special emphasis on their complex needs. CMT will discuss specific return on investment and cost avoidance strategies, some demonstrating year one impact.

## ***Overview***

Care Management Technologies, Inc. (CMT) is a health services provider with deep clinical expertise and extensive experience in behavioral health. Through the power of our health information technology, we deliver actionable information to clinicians at the point of treatment to improve quality of care and reduce costs. Unlike traditional disease management companies, CMT focuses on behavioral health issues, which often are barriers to treatment of other medical health conditions. Simultaneously, CMT addresses these medical co-morbidities and patient safety concerns through a variety of solutions. Our system provides a cost-effective, population-based approach that targets individuals whose care may deviate from evidence-based, best-practice standards. CMT continuously seeks to optimize clinical and economic outcomes for our clients, resulting from improved prescribing, increased adherence, and greater coordination of care for patients.

The following provides a visual illustration of how CMT's solutions make use of a common foundation and set of analytic tools while adding increasing clinical value:





## *Questions*

### **1. Please define the project proposed to reduce Medicaid assistance expenditures.**

#### ***Behavioral Pharmacy Management™***

Over the past 5 years, Kansas has been struggling with the rate in growth in Medicaid costs. In 2009, only 13% of this growth was explained by increased enrollment, the remaining 87% was due to the rise in medical costs per person. In the area of medical care, mental health services were the leading cost contributor making up 59% of the total cost increase, in large part related to the drugs used to treat mental illness. These mental health drugs have been Kansas Medicaid's largest drug expenditure as well as the most-prescribed (KHPA legislative report April 2010). We recommend implementing a Behavioral Pharmacy Management™ solution with prescriber interventions for Kansas Adult and Child Medicaid and CHIP beneficiaries to help address the rising costs associated with mental health treatment while improving the quality of care.

BPM intervenes with physicians who are practicing outside standards of best practice in order to improve clinical outcomes. The solution makes use of existing pharmacy data to identify prescribers of psychotropic medications who may not be following best-practice guidelines for the treatment of behavioral disorders and their associated patients. In addition, BPM addresses coordination of care and treatment redundancy by alerting the prescriber when their patient fails to refill their medication and in instances where there are multiple prescribers using the same medication class. BPM is designed to improve the benefits of pharmacological treatment, improve patient outcomes, and subsequently improve the cost-effectiveness of these treatments.

CMT has shown that mailed *Quality Indicators™* have a positive impact on prescribing practices. However, some prescribers remain recalcitrant to the standard audit and feedback approach. Targeted peer consultation is effective in persuading clinicians who do not respond to mailings to modify their prescribing practices towards better and more cost-effective care. Peer consultation can be implemented for prescribers who fail to change after receiving mailed interventions and/or it may be used to target specific outlier practices identified by CMT's algorithms such as the costly misuse of low-dose atypical antipsychotics for sedation.

CMT further recommends a Community Mental Health Center (CMHC) reporting subset that utilizes the BPM program for Local Systems of Care for the purpose of generating information about prescribing practices at selected CMHCs. This will allow review of trends in practice patterns, enable comparison of prescribing practices within the community, and promote local action for the improvement of quality care and cost efficiencies.



### ***Care Management Integration™***

We also recommend implementing Care Management Integration™ (CMI) to address the costly problem of fragmented care for the Medicaid recipients with co-morbid conditions and complex needs.

When multiple clinicians are treating a patient or when a patient has multiple co-morbidities, CMT's technology systematically analyzes all pharmacy, diagnostic and medical service data to establish a patient-centric medical home and compile an Integrated Health Profile (IHP), which is made available to all clinicians treating that patient.

CMI coordinates behavioral health with medical health services to offer a holistic, integrated understanding of the patient diagnostic and care picture for a complex population of individuals. These individuals have serious mental illnesses and chronic medical conditions (e.g. cardiovascular disease, COPD, diabetes, hypertension, obesity) and are at increased risk for poor health outcomes and higher service utilization costs.

Through our risk-predictive algorithm, CMT identifies a high risk cohort of patients and provides an analysis of the individuals' pharmacy and medical services claims data to create the framework for our proprietary Integrated Health Profile (IHP). The IHP includes medical and behavioral health information including diagnostic, service, pharmacy utilization information, health alerts which identify gaps in care and opportunities to improve prescribing. The results are that care inefficiencies, adverse drug interactions, and other adverse events are reduced, leading to better clinical outcomes and less costly care.

#### **a. What services or populations are affected?**

Kansas Child and Adult Medicaid and CHIP beneficiaries.

#### **b. What aspects of medical care are affected and how are medical costs reduced?**

Care Management Technologies combines state of the art information technology with the most recent evidence-based behavioral health research to:

1. Improve the quality of prescribing of psychoactive medications to better conform to practice guidelines;
2. Improve adherence to medications; and
3. Detect multiple prescribers of the same or same class medication.

CMT's educational and consultative mailed interventions have demonstrated clinical and financial impact, including improvement in provider prescribing practice by 50%, reductions in ER visits and



hospitalizations by up to 25%, and average behavioral pharmacy cost avoidance of \$70 per intervened patient per month or \$800 per year per patient on average.

**c. What is required of KHPA to achieve the proposed cost savings?**

KHPA may want to allocate resources to manage the project and prepare applicable data extracts. KHPA will be required to send complete claims data, pharmacy and services, once a month. After the implementation phase the project manager generally spends 2 hours a week on tasks related to the program. Below are general responsibilities of the two roles:

**Project Manager:** Manages the project internally, address questions related to clinical aspects and coordination workflows, along with serving as the liaison between the KHPA and CMT.

**Data/IT Manager:** Prepares extract data and sends data transmission feeds to CMT on an ongoing basis. Initially they are very active during the implementation phase. The IT staff works with the CMT Business Analyst to address any data issues.

**2. Define the steps required to implement the project.**

CMT's implementation team consists of an experienced Business Analyst and a dedicated Implementation Specialist who provide close oversight of project details. For new clients there is a 60-day implementation phase; however, since KHPA has already worked with CMT this may be shorter. Implementation is organized in a 7 phase process:



**a. What information or data are needed before implementation?**

BPM will utilize existing pharmacy claims data and CMI will utilize both pharmacy and services claims data both of which would not require special collection of data. Specific needs include:

- Claims Data: Pharmacy and Services
- Data Dictionary and Logic
- Provider Files
- Outcomes Require: Twenty-four months of historical claims



**b. What are its capabilities and possibilities for generating cost savings?**

CMT's outcomes data show that we have a positive effect in changing physician prescribing patterns toward evidence-based best practice. In our client studies, CMT's solutions have demonstrated improvement in treatment of over 50% above the natural rate of change toward evidence based prescribing. We find there is an even greater percentage realized among non-psychiatrists who are responsible for the greatest percentage of psychotropic prescribing in the U.S. CMT's educational and consultative mailed interventions have demonstrated clinical and financial impact, including improvement in provider prescribing practice by 50%, reductions in ER visits and hospitalizations by up to 25%, and average behavioral pharmacy cost avoidance of \$70 per intervened patient per month or , on average, \$800 per patient per year.

CMT employs an independently validated multiple baseline methodology; this innovative approach helps in the identification of a concurrent comparison group. Claims are analyzed for all patients receiving an intervention across a twelve-month program. The intervention cohort at a particular evaluation point is then compared to the remaining patients who have not yet received intervention. Over time, the comparison group becomes smaller at each evaluation point; the last cohort includes all remaining patients. Finally, this model accounts for the auto-correlation and uses time before and after an intervention to estimate cost avoidance.

Results of the impact of CMT's interventions can be seen in the table below titled, **Missouri First Intervention Study**. This study assessed the effect of mailed physician intervention messages on the rate of change in psychotropic medication costs. A first mailed intervention regarding 16,962 patients (adults continuously eligible for Missouri Medicaid in the study period 2002-2005 receiving psychotropic medications) was sent to the patient's physician between 6/03 and 11/04. The rate of change in psychotropic medication costs for the study period before the intervention was compared to the rate of change for the study period after intervention.



## Missouri First Intervention Study

REDUCTIONS IN COST AND HOSPITAL BED-DAYS & ADMISSIONS IN THE YEAR FOLLOWING FIRST INTERVENTION

	Measure	Number of Patients	Decline in Costs Percentage	Cost/Use Decrease / Patient / 1 <sup>st</sup> Year	Total Cost/Use Decrease
First Intervention Study: "Direct Effect"  <i>*patients intervened on</i>	Behavioral Pharmacy Costs	16,962	12.4%	\$739	\$12.53 million
	Non-Behavioral Pharmacy Costs	16,962	10.7%	\$507	\$8.60 million
First Intervention Study: "Collateral Effect"*** <i>**patients not intervened, MD received intervention regarding other pts</i>	Behavioral Pharmacy Costs	42,960	6.1%	\$66	\$2.84 million
	Non-Behavioral Pharmacy Costs	42,960	3.0%	\$133	\$5.71 million
First Intervention Study: "Direct Effect"  Schizophrenia Subpopulation  p <0.001	Inpatient Costs	6,310	24.1%	\$799	\$5.04 million
	Bed-Days	6,310	26.9%	1.2 bed-days /pt	7,572 days
	Admissions	6,310	22.8%	0.132 admission	833 admissions
	Outpatient Costs	6,310	3.8%	\$2,773	\$1.75 million

BPM and CMI provide mailed, first-tier communications and peer-to-peer outreach to prescribers and provider benchmarking reporting to the CMHCs, but it does not include direct communications to the Medicaid beneficiaries.

### d. What coordination is required among Medicaid programs?

None.

### e. When would savings be achieved after implementation?

Savings begin for the targeted individuals in the months following the first intervention mailings. The annual savings are calculated by multiplying the per user per month (PUPM) costs by the number of months following the intervention. Generally, the cost savings outcomes are analyzed





after the program has been running for a year, so that it permits adequate run out time following each cohort's intervention point.

**f. Estimate the amount of savings achieved or expected.**

Based on our national experience and validated studies, we would expect an average annual reduction in behavioral pharmacy costs for each patient intervened and up to 25% reduction in event reduction as measured by ER and hospital admissions.

Kansas utilized a *limited* Behavioral Pharmacy Management™ program from July 2006 - June 2007. Annualized savings during that time period was \$1.7 million for behavioral pharmacy spend alone. 2010 pharmacy expenditures plus implementation of an updated, comprehensive program with full capabilities including a robust Quality Indicator™ suite, provider messaging and education will enhance the cost savings return. With a fully utilized program, Kansas can expect an average savings similar to CMT's other state Medicaid programs of ~ \$70 pmpm in the first intervention year.

In general, CMT's book of business has demonstrated a **3:1 Return of Investment (ROI)**.

**g. Are the cost savings one time, annual, or recurring?**

The value of the BPM program is ongoing because prescribers continue to trigger additional QIs as their patient population changes.

**3. Provide references from locations where the proposer has implemented similar projects. Please include both government and private companies that use your system(s).**

Mark Just, VP Integrated Behavioral Health – Health Spring, Inc. (Adult and Elderly BPM, Online Analytics, educational programming, adherence report tools, pending peer consultation)

Joe Parks, MD, Medical Director, Missouri Department of Mental Health (Adult and Child BPM, Adult OPI, Adult and Child CMHC, Care Management Integration™ and Long-Term Care)

**4. Describe your experience and successes with managing medical cost savings programs or projects.**

CMT has a proven track record across multiple customers that demonstrates its interventions not only improve quality of prescribing and subsequently reduce behavioral health pharmacy spend,



but also reduce unnecessary and inappropriate medical care – hospitalizations, emergency room use, and medical pharmacy. A few examples are highlighted below:

#### ***Customer A***

This customer served an Adult and Child Medicaid Population of approximately 300,000 from 2006 to 2009. The CMT interventions utilized were Behavioral Pharmacy Management™ (BPM) and the Integrated Care Platform (CMI). BPM targeted 400 prescribers and CMI targeted up to 1000 adults and 1000 children.

- Significant cost offset was noted from 2006 to 2009 in the area of behavioral health and pharmacy (approximate \$5,000,000 in cost offset on a \$700,000 investment).
- Insignificant but downtrend noted in hospital admits for the adult population cohort.
- Significant decrease in hospital admissions for the child cohort.
- Significant decrease in ER visits for both cohorts served – adults and children.
- Significant reduction in overall medical spend for the child cohort even when excluding outlier spenders.

#### ***Customer B***

This customer serves a Medicaid population through a Disease Management Intervention. Approximately 15,000 enrollees were served by the Behavioral Pharmacy Management™ (BPM) Intervention via this DM approach, with CMT as the behavioral health subcontractor. Impact on services utilization for this cohort was:

- A statistically significant finding of approximately 800 fewer hospital admissions for the group of patients served in the program compared to a group of patients not served during the study period but eventually served.
- A statistically significant finding of approximately 1400 fewer ER visits for the group of patients served in the program compared to a group of patients not served during the study period but eventually served.

#### ***Customer C***

This customer serves a Medicaid population of 445,000 FFS adult and children. CMT provides a robust platform of intervention to this customer including BPM, DM Reporting, CMI, Site-Based Agency Educational Intervention/Peer Ranking, Diabetes Education and Data Analytics Support. Approximately 61,000 patients were served by one CMT intervention, approximately 16,000 served by two CMT interventions, and about 500 served by three or more interventions.



- Approximately \$28 million in behavioral health pharmacy cost avoidance seen in a one year period.
- A significant reduction in the number of treatment providers per child in the CMI program.
- Improvement in quality prescribing for all site based mailings (LTC, CMHC, and Habilitation centers) as evidenced by the reduction in number of Quality Indicators™ noted per prescriber.
- A significant improvement in medication adherence for the following critical health areas: diabetes, depression, antipsychotic, cardiovascular.
- A significant improvement in needed basic screenings in the following areas: COPD, retinal exams, CHF, hemoglobin A1C

CMT's solutions provide value to our clients, delivering positive economic, clinical quality and administrative improvements. They have been used by a diverse set of payors across the U.S. and have won numerous industry awards. Government agencies and private managed care organizations have praised CMT's solutions for improving quality of care, enhancing provider/patient relationships, and reducing overall healthcare costs.





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February 14, 2011

Barbara Langner, KHPA Medicaid Director  
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Re: RFI EVT0000191 Medicaid Cost Efficiencies

Dr. Langner:

In October 2010, The Kansas Health Policy Authority (KHPA) invited interested parties to respond to its *Request for Information* regarding health care cost efficiency projects for Medicaid and children's health insurance (CHIP) beneficiaries. Care Management Technologies (CMT) responded then, and would like to reiterate its continued interest.

Over the past 5 years, Kansas has been struggling with the rate in growth in Medicaid costs. In 2009, only 13% of this growth was explained by increased enrollment, the remaining 87% was due to the rise in medical costs per person. In the area of medical care, mental health services were the leading cost contributor making up 59% of the total cost increase, in large part related to the drugs used to treat mental illness (KHPA legislative report April 2010).

Nationally, the exponential costs associated with people with serious mental illness and comorbid physical health conditions validate KS experience. This population has complex needs, including substance abuse and physical health conditions at higher rates than the general population and costs generally run 2 – 3 x higher than the population without mental illness. These statistics hold true across all age ranges where complex needs—both behavioral and medical—are present.

CMT has a proven record of performance as a provider of decision support information designed to reduce costs while improving care for these same complex-need individuals. In the past eight years, CMT's analytic solutions have been used by over 30 state Medicaid agencies enabling them to avoid on average of \$800 per intervened patient per year on behavioral pharmacy costs (analysis methodology validated by Mercer.) Additionally, CMT's solutions have shown reductions in ER visits and hospitalizations by up to 25%.

In order to assist KHPA, Care Management Technologies proposes a comprehensive set of solutions for the Medicaid Adult and Child populations and CHIP beneficiaries and will provide return on investment and cost avoidance strategies in the first year of impact.

Regards,

A handwritten signature in dark ink, appearing to read "Michele R. Schoen".

Michele R. Schoen, Account Executive  
Attachments

